

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: HARRIS POND	Lake Area (ha): 1.21
Town: PITTSBURG	Maximum depth (m): 4.8
County: Coos	Mean depth (m): 1.8
River Basin: Connecticut	Volume (m <sup>3</sup> ): 22000
Latitude: 45°05'52" N	Relative depth: 3.9
Longitude: 71°22'11" W	Shore configuration: 1.03
Elevation (ft): 1830	Areal water load (m/yr): 9.37
Shore length (m): 400	Flushing rate (yr <sup>-1</sup> ): 5.10
Watershed area (ha): 18.1	P retention coeff.: 0.56
% watershed ponded: 0.0	Lake type: natural

<u>BIOLOGICAL:</u>		1 February 1995	2 August 1994
DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBRYON 75%	MALLOMONAS 95%
	#2	ASTERIONELLA 10%	
	#3	MALLOMONAS 5%	
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			40.69
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 41%	KELLICOTTIA 77%
	#2	FILINIA 33%	CILIATE SPP. 6%
	#3	POLYARTHRA 24%	
ROTIFERS/LITER		369	275
MICROCRUSTACEA/LITER		9	13
ZOOPLANKTON ABUNDANCE (#/L)		378	314
VASCULAR PLANT ABUNDANCE			Sparse
SECCHI DISK TRANSPARENCY (m)			2.7
BOTTOM DISSOLVED OXYGEN (mg/L)		4.5	0.6
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m): 3.0  
Hypolimnion volume (m<sup>3</sup>): None  
Anoxic volume (m<sup>3</sup>): 1000

**CHEMICAL:**

Lake: HARRIS POND

Town: PITTSBURG

	1 February 1995		2 August 1994		
DEPTH (m)	1.0	3.0	1.0		3.5
pH (units)	6.3	6.4	7.0		6.4
A.N.C. (Alkalinity)	20.8	21.7	11.4		12.9
NITRATE NITROGEN	0.09	0.08	< 0.05		0.06
TOTAL KJELDAHL NITROGEN	0.30	0.30	0.38		0.68
TOTAL PHOSPHORUS	0.015	0.013	0.029		0.098
CONDUCTIVITY ( $\mu$ mhos/cm)	46.4	47.2	37.6		41.5
APPARENT COLOR (cpu)	18	23			
MAGNESIUM			1.62		
CALCIUM			3.5		
SODIUM			0.8		
POTASSIUM			0.22		
CHLORIDE	< 2	< 2	< 2		< 2
SULFATE	5	5	5		5
TN : TP	26	29	13		8
CALCITE SATURATION INDEX			2.7		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1994**

D.O. S.D. PLANT CHL TOTAL CLASS

**	3	0	6	9	Meso.
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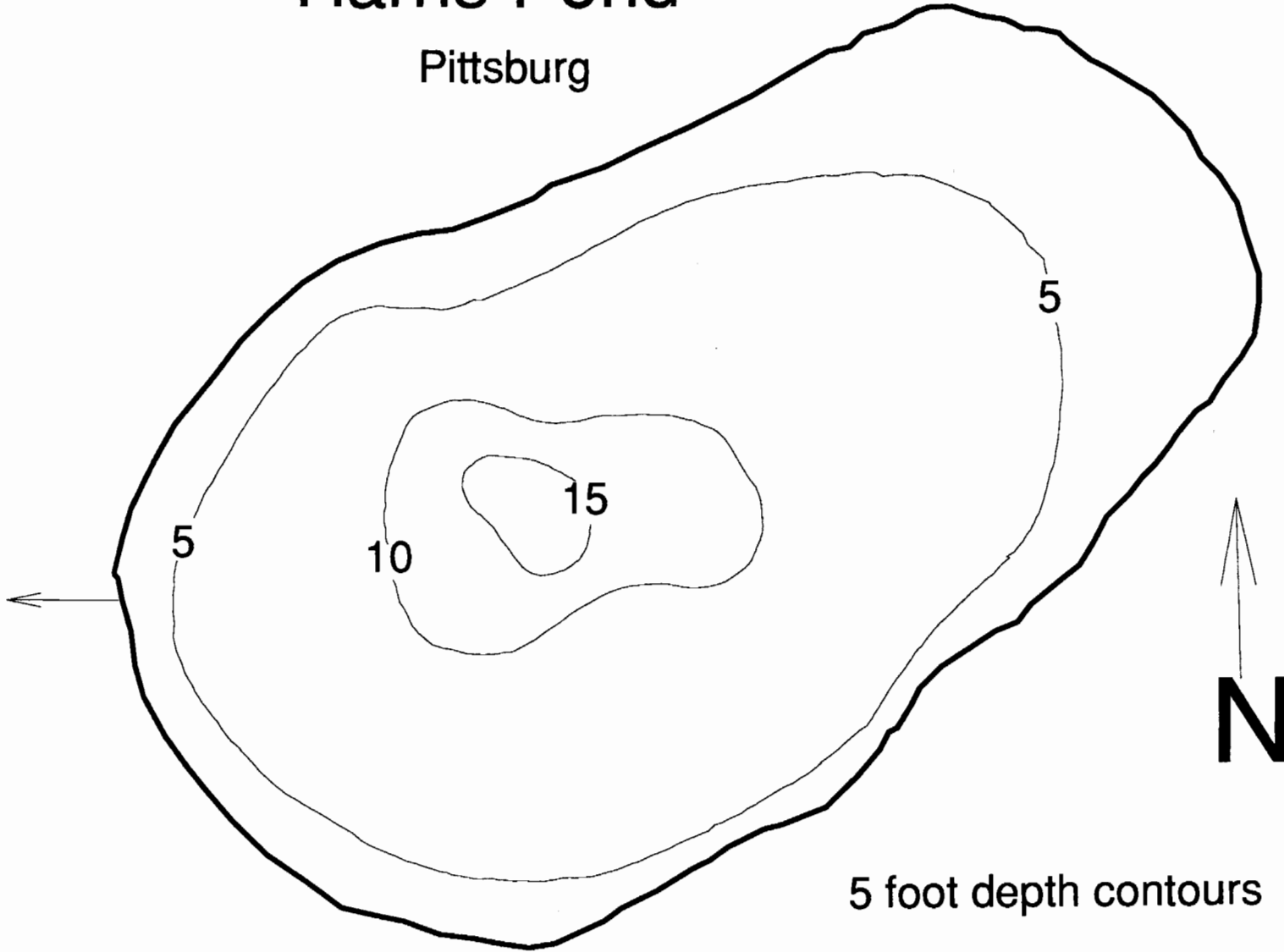
**COMMENTS:**

1. This is a somewhat remote pond sampled jointly with the NH Fish and Game Department. A very rough, 4-wheel drive road does access the pond.
2. Unusually high chlorophyll and phosphorus levels were present for an undeveloped remote pond. Phosphorus was clearly being released from the sediments in the anoxic bottom waters during the summer (note: phosphorus levels were not high in the winter).
3. ANC values were relatively high for NH ponds but were similar to nearby Back Lake.

# Harris Pond

Pittsburg

111-130



5 foot depth contours

0

0.1

Km

LAKE: HARRIS POND  
DATE: 08/02/94

**WEATHER: OVERCAST**

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SECCHI DISK (m): 2.7
BOTTOM DEPTH (m): 4.8
TIME: 830
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**RESULTS:** No dissolved oxygen was present below the thermocline at 3 meters.

111-131

# Harris Pond

Pittsburg

111-132

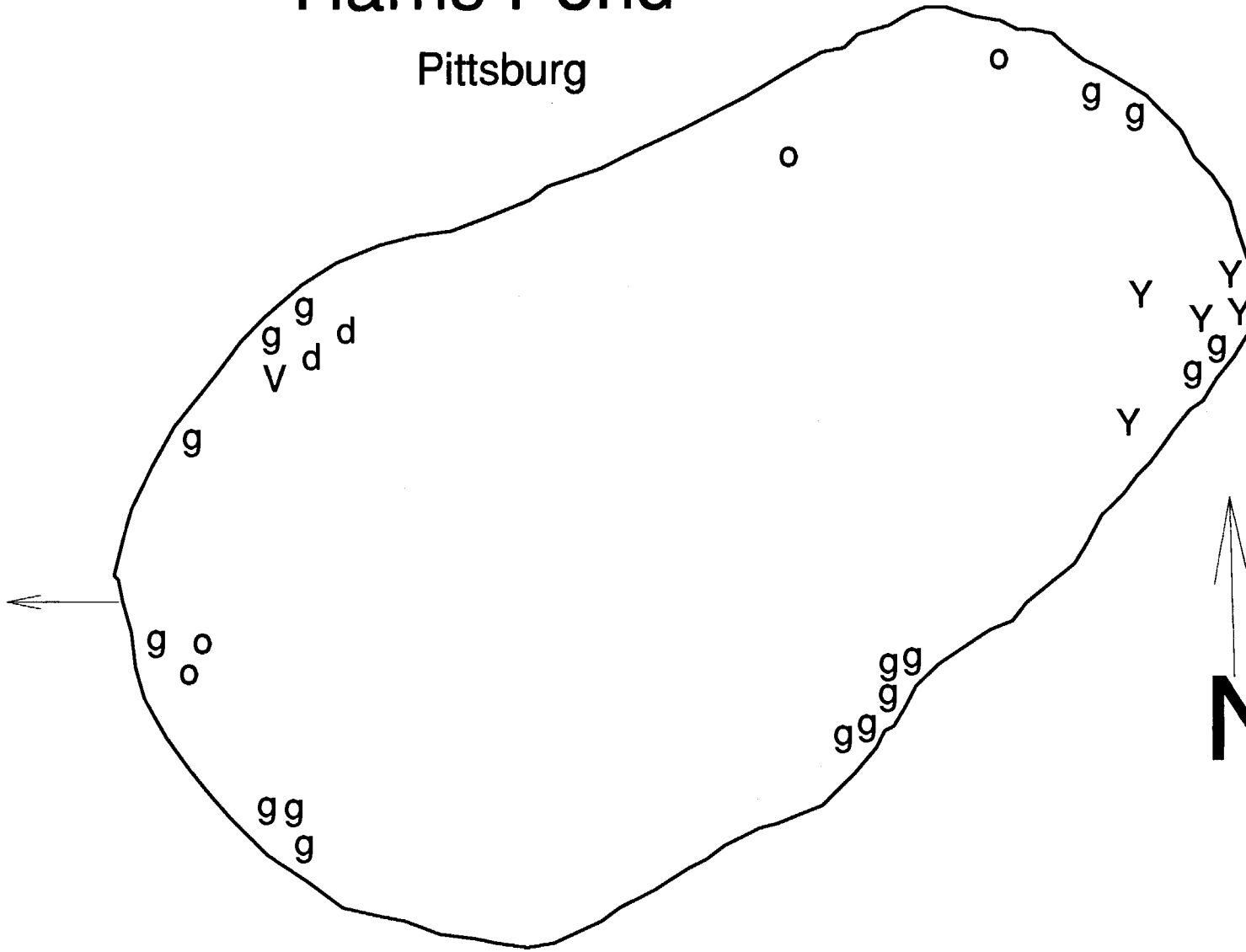


N

0

0.1

Km



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